WEED ALERT!

On July 3, 1990, Chapter 90-313 was approved and became law. The general public, members of the nursery industry and water resource managers need to be aware of the serious threat to Florida's environment posed by Schinus terebinthifolius, Melaleuca quinguenervia, Casuarina equisetifolia and Casuarina glauca and penalties provided by this law.

Casuarina Adans

Australian pine, beefwoods, Braziizan oak, horsetail tree

Three species of Australian pines (actually referred to as oaks in Australia) arrived in Florida in the late nineteenth century and are now quite naturalized. Casuarina (Casuarinaceae: beefwood family) are not actually pines at all, pines are gymnosperms and produce no true flowers, while beefwoods are angiosperm dicots with true flowers; the cone-like nuts and modified leaves only superficially resemble pines. Australian pines were planted around the state to stabilize ditch and canal banks, provide shade, and to produce lumber. These trees can reach 115 feet in height and thrive in salty, open sand and shell beaches, rocky coasts, sand bars and islands. Casuarina can grow as much as 5-10 feet per year and grow densely, blanketing the ground with needles. Species of Australian pine flower all year. The fruit is a small cone-like needled 8-15 **mm**

in diameter, which contains winged seeds easily distributed by the wind. These trees (especially C. equisetifolia and C. glauca) are forming dense thickets and displacing mangroves and other native vegetation, especially in the Florida Keys and lower east coast. The shading and chemicals leached from leaf litter suppress competing plants. Growths of Australian pines shade-out dune plants thereby opening beaches and dunes to erosion and also physically interfere with nesting activities of native endangered salt water crocodiles and sea turtles. The thick shallow roots are poor dune stabilizers compared %with native fine rooted plants and these trees readily succumb to hurricanes. Areas under Australian pines have been characterized as sterile with not much food for native wildlife.

The three species of **Castiarina** in Florida can be distinguished as follows (from Richard Wunderlin's Guide to the Vascular Plants of Central Florida, University Presses of Florida).

C, equisetifolia (Forst.) Australian pine, horsetail tree.6-8 per node, no brown band at base.

C.glauca Sieb. ex Spreng. Scaly-bark beefwood, Brazilian Oak. Leaves usually 12-16 per node, brown band at base; branches 0.7-1.0 **cm** in diameter, somewhat rigid, covered with whitish substance that can be rubbed off; plants produce suckers at base. **C.glauca** is an occasional species in scattered localities most commonly in Dade, Broward, Palm Beach, and Martin counties, produces dense stands, spreads by seeds and suckers from roots. C. equisetifolia (C. litorea) is common throughout southern Florida in disturbed sites especially in coastal counties.

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